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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/458,570	12/09/1999	DION RODGERS	042390.P7933	9005

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EXAMINER	
ELLIS, RICHARD L	
ART UNIT	**PAPER NUMBER**
2183	17

DATE MAILED: 03/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/458,570	RODGERS ET AL.	
	Examiner	Art Unit	
	Richard Ellis	2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 December 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13,15-30 and 32-36* is/are rejected.

7)☒ Claim(s) *14 and 31* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Claims 1-36 remain for examination.

2. The text of those sections of Title 35, US Code not included in this action can be found in a prior Office Action.

3. Claims 1-13, 15-30, and 32-35 are rejected under 35 USC § 103 as being unpatentable over Nation et al., U.S. patent 6,233,599.

4. Claim 36 is rejected under 35 USC § 103 as being unpatentable over Nation et al., U.S. patent 6,233,599, as applied to claims 1-13, 15-30, and 32-35.

Nation et al. was cited as a prior art reference in paper number 13, mailed August 14 2003.

5. The rejections are respectfully maintained and incorporated by reference as set forth in the last office action, paper number 13, mailed August 14 2003.

6. Applicant's arguments filed December 11, 2003, paper number 16, have been fully considered but they are not deemed to be persuasive.

7. In the remarks, applicant argues in substance:

7.1. That: "[in regards to claim 1] Nation discloses saving the state of the active thread i, transferring the activity specified data for thread i from the activity specified register to the active register subset, and setting a corresponding flag within the thread status register (Nation 13:32-42), which is distinct from 'configuring a functional unit'. On the contrary, in Nation, while several operations are performed on a thread responsive to a thread switch event (Nation 13:32-42), the thread controller maintains the same configuration. ... There is no indication that a functional unit in Nation is configured *responsive to the change of status for the first thread within the multithread processor.*"

This is not found persuasive because applicant is arguing a narrow viewpoint of the meaning of "configuring a functional unit" which is absent from the claim language. As applicant is well aware claimed subject matter, not the specification, is the measure of invention. Limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art. *In re Self*, 213 USPQ 1,5 (CCPA 1982); *In re Priest*, 199 USPQ 11,15 (CCPA 1978).

> "It is the claims that measure the invention." *SRI Int'l v. Matshshita Elec. Corp.*, 775 F.2d 1107, 1121, 227 USPQ 577, 585 (Fed. Cir. 1985) (en banc).

> "The invention disclosed in Hiniker's written description may be outstanding in its

field, but the name of the game is the claim." *In re Hiniker Co.*, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998).

"[A]s an initial matter, the PTO applies to the verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification." *In re Morris*, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997).

"limitations appearing in the specification will not be read into the claims, and ... interpreting what is meant by a word in a claim 'is not to be confused with adding an extraneous limitation appearing in the specification, which is improper'." *Intervet Am., v. Kee-Vet Labs.*, 12 USPQ2d 1474, 1476 (Fed. Cir. 1989)(citation omitted).

"it is entirely proper to use the specification to interpret what the patentee meant by a word or phrase in the claim, ... this is not to be confused with adding an extraneous limitation appearing in the specification, which is improper. By 'extraneous,' we mean a limitation read into a claim from the specification wholly apart from any need to interpret ... particular words or phrases in the claim." *In re Paulsen*, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994) (citation omitted).

Applicant is reading into the claim term "configuring a functional" unit some aspect of the invention which has yet to be defined and presented within the claim language. Applicant's claim language merely states the bare terms "configuring a functional unit". Absent any language within the claim to narrow the boundaries of these terms, these terms encompass any form of configuring of a functional unit, no matter what that form of configuring may entail. In Nation et al., as shown in fig. 5, when a thread switch occurs, the system first saves the current context of the currently executing thread (525) and loads the context of a next thread to execute (545). As "a functional unit" encompasses the execution units as well as the register files of the processor (i.e., the thread context), by saving the context of an executing thread and loading the context of a next to execute thread, Nation et al. has "configured" (i.e., changed, adjusted, etc.) the functional unit by changing it from holding a context of the first thread to holding a context of a next to execute thread. Should applicant wish his unstated and therefore unknown special definition of "configure" to provide a difference between his claim language and the cited prior art, he must incorporate that definition into the claim language itself.

7.2. That: "Nation fails to disclose maintaining a state machine to provide a multi-bit output,

> wherein each bit of the multi-bit output indicates the status of the associated thread as being active or inactive as required by claim 2. The Office Action asserted that a READY flag in Nation corresponds to the "active" status of claim 2 and that "NOT-READY" flag corresponds to the "inactive" status of claim 2. The Examiner's attention is directed to Figure 5, where Nation discloses marking all loaded threads as "READY" at block 502, and then setting the active thread as thread 0. Nation discloses a paradigm where a thread may have a status as "READY" but is not "active" (Nation 12:37-57), and thus a "READY" status does not correspond to an "active" status of claim 2."

This is not found persuasive because again, applicant appears to be applying a definition of terms that differs from conventional usage, and that is unstated in the claim language. Conventional usage of the term "active" as known in the computer arts is:

> "**active** (1) operational. (2) pertaining to a node or device that is connected or is available for connection to another node or device. cf. *inactive*." *Dictionary of Computers, Information Processing & Telecommunications*, Second Edition, Jerry M. Rosenberg editor, John Wiley & Sons, Inc., 1987.

As seen from the conventional usage of the term "active", the meaning is one of a device that "is connected" or that "is available for connection". In the case of Nation et al. a thread marked "READY" is "available for execution" and therefore is "active" as that term is conventionally defined. Therefore, Nation et al.'s "READY" does indeed correspond to applicant's claimed "active" to the extent that any narrowing definition of "active" is provided by the claim language.

7.3. That: "Nation does not disclose an 'apparatus comprising a state machine ... and configuration logic to configure a functional unit within the multithreaded processor ...' as required by claim 18"

This is not found persuasive for the same reasons as the discussion regarding claim 1 above, in that applicant is applying a secret unstated definition for "configure a functional unit" in attempting to read the claims over the reference. Absent specific language in claim 18 defining the actual meaning of "configure a functional unit" within the claim itself, the claim can only be read to mean "configure a functional unit" which as stated previously is so broad that it encompasses any kind of "configuration" in any amount and in any way.

8. Claims 14 and 31 are objected to as being dependent upon a rejected base claim, but would render the base claim allowable if bodily incorporated into the base claim such that the

new base claim included all of the original limitations of the base claim, any intervening claims, and the objected claim.

9. **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR § 1.136(a). The practice of automatically extending the shortened statutory period an additional month upon the filing of a timely first response to a final rejection has been discontinued by the Office. See 1021 TMOG 35.

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 CFR § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Richard Ellis whose telephone number is (703) 305-9690. The Examiner can normally be reached on Monday through Thursday from 7am to 5pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Eddie Chan, can be reached on (703) 305-9712. The fax phone number for the USPTO is: (703)872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Richard Ellis
February 24, 2004